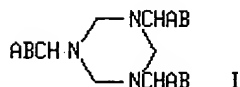


ACCESSION NUMBER: 1986:553325 CAPLUS
 DOCUMENT NUMBER: 105:153325
 ENTRY DATE: Entered STN: 01 Nov 1986
 TITLE: Glyphosate derivatives
 PATENT ASSIGNEE(S): Monsanto Co. , USA
 SOURCE: Belg., 45 pp.
 CODEN: BEXXAL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 INT. PATENT CLASSIF.:
 MAIN: C07D
 SECONDARY: C07F; A01N
 CLASSIFICATION: 29-7 (Organometallic and Organometalloidal Compounds)
 Section cross-reference(s): 5
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| BE 903416 | A1 | 19860410 | BE 1985-215711 | 19851010 <-- |
| PRIORITY APPLN. INFO.: | | | US 1984-659795 | 19841011 |
| GRAPHIC IMAGE: | | | | |



ABSTRACT:

Herbicidal phosphonomethylglycine (glyphosate) derivs. are prepd. by reacting Me3CN:CH2 with ABCHNH2.HX (A,B = CN, ZCO2R, CO2R; Z = C1-6 alkylene; R is an esterifying radical; X is an anion) to give the hexahydrotriazine I, which is reacted with a H3PO3 deriv. R1P(OY)2 (R1 = OY, OH; Y is an esterifying radical). Thus, a mixt. of ClCH2CH2OCOCH2NH2.HBr, Me3CN:CH2 and MePh was stirred for 2 h give an intermediate, which upon reaction with P(OSiMe3)3 gave ClC12Cl2OCOCH2NHCH2PO3H2 (II). In greenhouse expts., post-emergence 4.48 kg II/ha totally controlled Cirsium, Limnorcharia, Panicum and other weeds.

SUPPL. TERM: glyphosate deriv herbicide prepn; post emergence herbicide
 glyphosate; phosphonomethylglycine post emergence herbicide
 INDEX TERM: Herbicides
 (postemergence, glyphosate derivs., prepn. of)
 INDEX TERM: 623-33-6 13433-00-6 15960-31-3 20777-85-9 32213-95-9
 55878-21-2 104403-66-9 104403-67-0 104403-68-1
 104403-69-2 104403-70-5 104403-73-8 104403-74-9
 104403-76-1 104403-80-7 104403-81-8 104403-82-9
 104403-83-0 104403-84-1 104425-75-4
 ROLE: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization of, with butylazomethine)
 INDEX TERM: 13987-61-6
 ROLE: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization of, with glycinate)
 INDEX TERM: 60672-94-8P 104403-77-2P 104403-79-4P 104403-86-3P
 104403-87-4P 104403-88-5P
 ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP
 (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with di-Ph phosphite)
INDEX TERM: 85310-88-9P
ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with tri-Ph phosphite)
INDEX TERM: 63856-14-4P 85347-27-9P 91169-11-8P 98565-07-2P
98565-08-3P 98565-09-4P 98565-10-7P 104403-71-6P
104403-72-7P 104403-75-0P
ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with tris(trimethylsilyl) phosphite)
INDEX TERM: 39600-46-9P 39600-51-6P 63913-70-2P 69162-30-7P
69162-32-9P 69162-34-1P 74580-17-9P 98565-11-8P
98565-13-0P 104403-56-7P 104403-57-8P 104403-58-9P
104403-59-0P 104403-60-3P 104403-61-4P 104403-62-5P
104403-63-6P 104403-64-7P 104403-65-8P 104403-78-3P
104403-85-2P 104425-73-2P 104425-74-3P
ROLE: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as herbicide)
INDEX TERM: 101-02-0 4712-55-4
ROLE: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with hexahydrotriazine derivs.)

INDEX TERM: 1795-31-9
ROLE: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with hexahydrotriazines)

INDEX TERM: 98565-12-9
ROLE: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with phosphites)